0014234

U.S. Department of Transportation
Federal Aviation Administration

Advisory Circular

Subject: **Continued Use Of MIL-S-8879C, General Specification For Screw Threads, Controlled Radius Root With Increased Minor Diameter**

Date: 2/26/99 Initial: AIR-120 AC No: 21-41 Change:

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1. **PURPOSE.** This advisory circular (AC) provides information, clarification, and procedural guidance concerning the Inactivation of MIL-S-8879C, Screw Threads, Controlled Radius Root with Increased Minor Diameter, as it relates to the civil aviation industry.

2. **RELATED FEDERAL AVIATION REGULATIONS (FAR).** The related sections of the FAR's are:

FAR 21.53 Statement of Conformity;
FAR 23.603 Materials and Workmanship;
FAR 25.603 Materials;
FAR 27.603 Materials;
FAR 29.603 Materials;
FAR 31.33(a) and (b) Materials;
FAR 33.15(b) Materials;
FAR 35.17(b) Materials;

3. **BACKGROUND.**

a. The Department of Defense (DoD) has dramatically changed the way it buys new systems and equipment. The DoD is relying on performance specifications and leaving the responsibility for design decisions and internal processes, such as quality control, in the hands of the manufacturer. This change allows the DoD to place MIL-S-8879C in an "inactive" status, thereby eliminating the requirement for the DoD to cite military specifications and standards in solicitations for new designs or in contracts for newly designed equipment. However, the inactivation of MIL-S-8879C **only** constrains the actions of DoD's acquisition community. For all other users of the military specifications, copies of MIL-S-8879C will continue to be available from the Defense Automated Printing Service, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.

b. At the present time, the Society of Automotive Engineers (SAE) is in the process of converting selected inactive or canceled military specification into Aerospace Standards (AS). SAE has stated that it intends to use the same numbering system as the military specifications (e.g., AS-8879A).

c. When a design approval holder specifies a military specification in their design, it becomes part of the FAA approved design. Revision, inactivation or cancellation of a military specification by DoD has no effect on the approved design. All changes to approved designs must be FAA approved in accordance with 14 Code of Federal Regulations (CFR) part 21.

4. DISCUSSION.

a. According to the DoD, in situations where the DoD determines that the use of performance specifications is not practical, and a suitable, industry-accepted replacement non-government standard does not exist, then DoD's use of MIL-S-8879C may only be cited when re-procuring previously designed items.

b. Civil aviation users or purchasers of fasteners (e.g., aircraft manufacturers, aircraft systems or component designers, air carriers and maintenance facilities of civil aviation products) or users of other threaded devices for which MIL-S-8879C is cited on approved drawings or in the approved technical data package, shall continue to use MIL-S-8879C as the approved means of ascertaining the thread geometry for screw fasteners. Use of other specifications must be FAA approved in accordance with 14 CFR part 21.

James C. Jones
Manager, Aircraft Engineering Division